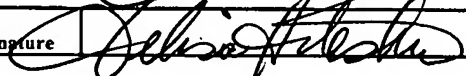


Substitute for Form 1449 A & B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				<i>Complete if Known</i>	
				Application Number	10/564,734
				Confirmation Number	9627
				Filing Date	January 17, 2006
				First Named Inventor	Fumio MATSUMOTO
				Art Unit	Unknown 3432
Examiner Name	H. Fathen				
Attorney Docket Number	Q76643				
Sheet	1	of	1		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
F.H. F.H.		JP	1-208396	A	08/22/1989	NIPPON MINING CO.	Abstract
		JP	3-40987	A	02/21/1991	NIPPON TELEGR & TELEPH CORP.	Abstract

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
F.H.		KEIGO HOSHIKAYA, "BULK CRYSTAL GROWING TECHNIQUE", ADVANCED ELECTRONICS SERIES 1-4, PAGES 1-4 and PAGES 236-241	Yes
F.H.		U. SAHR, "GROWTH OF S-DOPED 2" InP-CRYSTALS BY THE VERTICAL GRADIENT FREEZE TECHNIQUE", 2001 INTERNATIONAL CONFERENCE ON INDIUM PHOSPHIDE AND RELATED MATERIALS CONFERENCE PROCEEDINGS, May 14-18, 2001, PAGES 533-536	—

Examiner Signature		Date Considered	8/17/2006
--------------------	---	-----------------	-----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO				Complete if Known	
				Application Number	National Stage of PCT/JP2004/010555
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Confirmation Number	Unknown
				Filing Date	January 17, 2006
				First Named Inventor	Fumio MATSUMOTO
				Art Unit	Unknown 1722
				Examiner Name	Hiteshew
Sheet	1	of	2	Attorney Docket Number	Q76643

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁴
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
FH	7	EP	0 971 052	A	01/12/2000	mitsubishi chem. corp.	
FH		EP	0 992 618	A	04/12/2000	JAPAN ENERGY CORP.	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁴
FH	7	GAULT: "A NOVEL APPLICATION OF THE VERTICAL GRADIENT FREEZE METHOD TO THE GROWTH OF HIGH QUALITY III-V CRYSTALS", JOURNAL OF CRYSTAL GROWTH, NORTH-HOLLAND PUBLISHING CO. AMSTERDAM, NL, Vol. 74, No. 3, 1986, pages 491-506, XP002121188, ISSN: 0022-0248	
FH	7	Y YABUHARA, ET AL, "HIGH QUALITY InP SUBSTRATES GROWN BY THE VCZ METHOD" INDIUM PHOSPHIDE AND RELATED MATERIALS, 1996. IPRM '96., EIGHTH INTERNATIONAL CONFERENCE ON SCHWABISCH-GMUND, GERMANY 21-25 April 1996, NEW YORK, NY, USA, IEEE, US, April 21, 1996, pages 35-38, XP010157617, ISBN: 0-7803-3283-0	
FH	A	YASUMASA OKADA, ET AL, INSTITUTE OF PHYSICS: "DISLOCATION ELIMINATION IN VERTICAL GRADIENT FREEZE GROWN GAAS SINGLE CRYSTALS" GALLIUM ARSENIDE AND RELATED COMPOUNDS., JERSEY, 24-27 SEPT., 1990, PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON GALLIUM ARSENIDE AND RELATED COMPOUNDS. (TITLE FROM 1994 ONWARDS: PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON COMPOUND SEMICONDUCTORS, Vol. SYMP. 17, September 24, 1990, pages 61-66, XP000146745	
FH	7	T. ASahi, ET AL, "VGF CRYSTAL GROWTH AND VAPOR-PHASE FE DOPING TECHNOLOGIES FOR SEMI-INSULATING 100MM DIAMETER INP SUBSTRATES", 1999 11 TH INTERNATIONAL CONFERENCE ON INDIUM PHOSPHIDE AND RELATED MATERIALS., CONFERENCE PROCEEDINGS., IPRM DAVOS, MAY 16-20, 1999, INTERNATIONAL CONFERENCE ON INDIUM PHOSPHIDE AND RELATED MATERIALS, NEW YORK, NY: IEEE, US, Vol. Conf. 11, May 16, 1999, pages 249-254, XP000931439, ISBN: 0-7803-5563-6	
FH	Y	YASUMASA OKADA, ET AL, "MECHANISM OF A REDUCTION OF DISLOCATION DENSITIES IN VERTICAL-GRADIENT-FREEZE-GROWN GAAS SINGLE CRYSTALS", JAPANESE JOURNAL OF APPLIED PHYSICS, PUBLICATION OFFICE JAPANESE JOURNAL OF APPLIED PHYSICS., TOKYO, JP, Vol. 29, No. 11 PART 2, November 1, 1990, pages L1954-L1956, XP000232823, ISSN: 0021-4922	

Examiner Signature		Date Considered	8/14/07
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	National Stage of PCT/JP2004/010555
				Confirmation Number	Unknown
				Filing Date	January 17, 2006
				First Named Inventor	Fumio MATSUMOTO
				Art Unit	Unknown 1700
				Examiner Name	Hiteshew
Sheet 2 of 2				Attorney Docket Number	Q76643

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL-LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
FH	Y	PATENT ABSTRACTS OF JAPAN, Vol. 0151, No. 77 (C-0829), May 7, 1991 & JP 3 040987 A (NIPPON TELEGR & TELEPH CORP <NTT>), February 21, 1991	
FH	Y	D. ZEMKE, ET AL, "GROWTH OF INP BULK CRYSTALS BY VGF: A COMPARATIVE STUDY OF DISLOCATION DENSITY AND NUMERICAL STRESS ANALYSIS", PROCEEDINGS OF THE EIGHTH INTERNATIONAL CONFERENCE ON INDIUM PHOSPHIDE AND RELATED MATERIALS 1996., SCHWABISCH-GMUND, APR. 21-25, 1996, PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON INDIUM PHOSPHIDE AND RELATED MATERIALS (IPRM), NEW YORK, IEEE, US, Vol. CONF. 8, April 21, 1996, pages 47-49, XP000634431; ISBN: 0-7803-3284-9	

Examiner Signature: <i>[Signature]</i>	Date Considered: 8/14/2009
--	----------------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.